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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/560,366

02/15/2006

Tetsuya Takahashi

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25944 7590 04/29/2009

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ALEXANDRIA, VA 22320-4850

EXAMINER

ECHELMMEYER, ALIX ELIZABETH

ART UNIT

PAPER NUMBER

1795

MAIL DATE

DELIVERY MODE

04/29/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/560,366	Applicant(s) TAKAHASHI ET AL.	
	Examiner Alix Elizabeth Echelmeyer	Art Unit 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/12/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. This Application claims priority as a 371 to PCT/JP04/08573, filed June 11, 2004, which claims priority to Japanese Application 2003-169974, filed June 13, 2003.

Information Disclosure Statement

2. The Information Disclosure Statement filed December 12, 2005 has been considered.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Okahisa et al. (US 6,451,478).

Okahisa et al. teach an electrochemical device, comprising an electrode element having a pair of electrode layers, which is contained within a pair of metal container members (abstract). The element is sealed by crimping the end part of one container member around the other container member, with a gasket between the container members (abstract).

The gasket is made of an insulating resin (column 2 lines 55-60).

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With regard to claim 3 and further regarding claim 1, the gasket is bonded to the container by a heat sensitive resin (column 3 line 63 - column 4 line 6). When the adhesive is heated, the gasket is heated. The result is that the container pieces are bonded.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okahisa et al. as applied to claim 1 above, and further in view of Hatta et al. (WO00/26976, with US 6,797,430 being used as a translation).

The teachings of Okahisa et al. as discussed above are incorporated herein.

Okahisa et al. teach that the gasket may be made of polyethylene or polypropylene (column 2 lines 64-67) but fail to teach that it is made of acid-denatured polyethylene or acid-denatured polypropylene.

Hatta et al. teach the use of acid-denatured polyolefin, e.g. polypropylene, for use in bonding elements in a battery, since acid-denatured polyolefins yield excellent welding of the case materials (column 6 lines 38-51).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use acid-denatured polypropylene as the gasket

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material in Okahisa et al. such as taught by Hatta et al., since acid-denatured polypropylene would provide excellent welding when the container was heated.

7. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okahisa et al. in view of Ruben (US 2,536,696).

The teachings of Okahisa et al. as discussed above are incorporated herein.

Okahisa et al. teach an electrochemical device, comprising an electrode element having a pair of electrode layers, which is contained within a pair of metal container members (abstract). The element is sealed by crimping the end part of one container member around the other container member, with a gasket between the container members (abstract).

The gasket is made of an insulating resin (column 2 lines 55-60). The gasket is bonded to the container by a heat sensitive resin (column 3 line 63 - column 4 line 6). When the adhesive is heated, the gasket is heated. The result is that the container pieces are bonded.

Okahisa et al. fail to teach an electrically insulative resin part bonded from one container member to the other container member so as to cover the joint between the container members.

Ruben teaches a similarly structured crimped electrochemical device to that of Okahisa et al., including two container members to surround the electrochemical element (Figures 1 and 2).

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Ruben further teaches a coating on the joint between the container members (14) made of an inert adhesive (Figure 1; column 5 lines 73- column 6 line 2).

Ruben teaches that this joint coating (14) is desirable since it ensures against creep of the electrolyte, and provides extra sealing in case the crimp was not strong enough to create a good seal.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a joint coating over the joint of Okahisa et al. such as taught by Ruben, in order to ensure against creep of the electrolyte, and provide extra sealing in case the crimp is not strong enough to create a good seal.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alix Elizabeth Echelmeyer whose telephone number is (571)272-1101. The examiner can normally be reached on Mon-Fri 8-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/PATRICK RYAN/
Supervisory Patent Examiner, Art Unit 1795

Alix Elizabeth Echelmeyer
Examiner
Art Unit 1795

aee